

Claims

What is claimed is:

1. A method of forming a wellbore casing within a borehole that traverses a subterranean formation, comprising:
 - assembling a tubular liner by a process comprising:
 - coupling a threaded portion of a first tubular member to the threaded portion of a second tubular member; and
 - coupling a tubular sleeve to the threaded portions of the first and second tubular members;
 - positioning the tubular liner assembly within the borehole; and
 - radially expanding and plastically deforming the tubular liner assembly within the borehole; wherein coupling the tubular sleeve to the threaded portions of the first and second tubular members comprises:
 - applying impulsive magnetic energy to the tubular sleeve.
2. A method of forming a coupling between metallic tubular members comprising a process comprising the steps of:
 - forming a female coupling portion on a first tubular member;
 - forming a male coupling portion on a second tubular member;
 - forming at least one raised ridge ring between the male and female coupling portions;
 - coupling the female coupling portion of the first tubular member and the male portion of the second tubular member including pressing the coupling portions together in surface-to-surface contact;
 - applying a tubular sleeve to exterior surfaces of the pressed together coupling portions of the first and second tubular members using a magnetic impulse generator; and
 - radially expanding and plastically deforming the coupling between the tubular members with the tubular sleeve applied.
3. The process as in claim 2 wherein the step of coupling the male and female coupling portions together further comprises the step of forming at least one ridge ring interposed between the coupling portions to increase the surface-to-surface stress, thereby facilitating sealing between the first and second tubular members.

4. The process as in claim 2 wherein the step of coupling the male and female coupling portions together further comprises the step of forming a layer of material softer than the metallic tubular members interposed between the coupling portions to increase the surface-to-surface stress, thereby facilitating sealing between the first and second tubular members.